

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.		
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)	
PCT/CA 03/01606	21/10/2003	23/10/2002	
Applicant PULP AND PAPER RESEARCH I	NSTITUTE OF CANADA		
according to Article 18. A copy is being tr			
1. Pagin of the report			
Basis of the report a. With regard to the language, the language in which it was filed, un	international search was carried out on the bar less otherwise indicated under this item.	sis of the international application in the	
the international search w Authority (Rule 23.1(b)).	vas carried out on the basis of a translation of t	he international application furnished to this	
b. With regard to any nucleotide an was carried out on the basis of th contained in the internation filed together with the internation furnished subsequently to the statement that the subsequent international application a	e sequence listing: onal application in written form. ernational application in computer readable form o this Authority in written form. o this Authority in computer readble form. osequently furnished written sequence listing d is filed has been furnished.		
2. Certain claims were fou	nd unsearchable (See Box I).		
3. Unity of invention is lac	king (see Box II).		
4. With regard to the title , X the text is approved as su the text has been establis	bmitted by the applicant. hed by this Authority to read as follows:		
5. With regard to the abstract , X the text is approved as su the text has been establis within one month from the	bmitted by the applicant. hed, according to Rule 38.2(b), by this Authorit date of mailing of this international search rep	ty as it appears in Box III. The applicant may, ort, submit comments to this Authority.	
6. The figure of the drawings to be publ			
as suggested by the appli		None of the figures.	
because the applicant fails	•		
because this figure better	characterizes the invention.	·	



International Application No PC 03/01606

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 D21C9/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-D21C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Α .	WO 02 25007 A (PULP PAPER RES INST ;HU THOMAS Q (CA)) 28 March 2002 (2002-03-28) cited in the application the whole document	1-29	
A	US 5 318 851 A (BARON ARTHUR L ET AL) 7 June 1994 (1994-06-07) cited in the application the whole document	1-29	
A	US 2002/056534 A1 (THOMAS HU Q) 16 May 2002 (2002-05-16) the whole document	1-29	
A .	US 2002/124980 A1 (HEITNER CYRIL ET AL) 12 September 2002 (2002-09-12) the whole document/	1-29	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filing date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filing date but later than the priority date claimed	 "T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
16 March 2004	26/03/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Karlsson, L

Form PCT/ISA/210 (second sheet) (July 1992)

International Application No		
 PO	03/01606	

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	WO 99 23117 A (VALTION TEKNILLINEN; VIIKARI LIISA (FI); BUCHERT JOHANNA (FI); KRU) 14 May 1999 (1999-05-14) the whole document	1-29	
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03/01606 Patent document Publication Patent family Publication cited in search report date member(s) date WO 0225007 Α 28-03-2002 AU 9155101 A 02-04-2002 WO 0225007 A2 28-03-2002 CA 2421397 A1 28-03-2002 US 2002056534 A1 16-05-2002 US 5318851 Α 07-06-1994 US 5213897 A 25-05-1993 BR 9201114 A 24-11-1992 CA 2060021 A1 04-10-1992 EP 0507333 A2 07-10-1992 JP 6122755 A 06-05-1994 MX 9201519 A1 01-10-1992 US 2002056534 **A1** 16-05-2002 9155101 A ΑU 02-04-2002 WO 0225007 A2 28-03-2002 CA 2421397 A1 28-03-2002 US 2002124980 **A1** 12-09-2002 US 6500303 B1 31-12-2002 US 6254724 B1 03-07-2001 ΑU 723502 B2 31-08-2000 ΑU 9066098 A 16-02-1999 BR 9811525 A 05-09-2000 CA 2295631 A1 04-02-1999 CN 1270580 T 18-10-2000 WO 9905108 A1 04-02-1999 EP 1000032 A1 17-05-2000 JP 2001510881 T 07-08-2001 TW 460641 B 21-10-2001 ZΑ 9806521 A 25-01-1999 WO 9923117 Α 14-05-1999 FΙ 974139 A 05-05-1999 ΑU 1035199 A 24-05-1999 WO 9923117 A1 14-05-1999

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